



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,336	12/20/2001	Yasutomo Kosugi	62807-026	2519

7590 11/21/2003

McDermott, Will & Emery
600, 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

SCHLAK, DANIEL K

ART UNIT PAPER NUMBER

3653

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,336

Applicant(s)

KOSUGI, YASUTOMO

Examiner

Daniel K Schlak

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) ✓
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

In the abstract, line 5, the word "calculate" should be changed to "calculated".

The disclosure is objected to because of the following informalities:

The sub-heading "Summary of Invention" should be moved from Page 1 to line 27 of Page 2.

On page 6, line 13, the pressure sensor is incorrectly labeled as reference numeral (14), which was not to be found in the drawings.

Appropriate correction is required.

Election/Restrictions

Applicant's election with traverse of the restriction between Groups I and II in Paper No. 6 is acknowledged. The traversal has no basis, nor is it an adequate traversal. However, the Examiner has removed the restriction requirement between Groups I and II, and has examined Group II alongside Group I.

Art Unit: 3653

Group III (claims 18-20) has been removed from further consideration. This requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claim 3 and 4 are objected to because of the following informalities: they recite a "full-bill" detection station. As a "bill" cannot be "full", this designation for the detection station is inappropriate.

Claim 4 further recites, in lines 9-10, the detection section "and nor..." The examiner believes that the word "and" should be deleted.

Claim 8, the word "wherein" should be inserted before the word "when" in line 2.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12, 16, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites that the control section "drives said pushing plate..." A control section cannot push anything. Only a motor can push... or, as is claimed in claim 14, a "pushing section" can be controlled by the control section to push.

Art Unit: 3653

Claim 2, in line 7, recites that the control section "reports an amount of bills..."

Reports to whom? To what? There is no basis for the reporting of anything, as there is no claimed structure for receiving the report, nor is there any display means claimed by which it could be reported to an operator.

Claim 3 recites "reports an amount of bills" in 7. This recitation suffers the same indefiniteness as the identical recitation of claim 2. There is nothing and no one to which to report, and therefore the word "report" conveys no substance.

Claim 4 recites that the control section "adds an amount of bills..." to a "...small amount of bills..." to an "amount of bills..." How can the control section add bills? What on earth is an "amount of bills according to a small amount of bills?" To what does it add it?

Claim 4, at the end, divides the sum by two to "report a result..." Again it must be asked, to what/whom is this reporting done? If there is nothing or no one by which it is received, then is it really reported? Can it be used? Without a receiving structure, there is not only no means by which to receive, there is also no utility for this action whatsoever. A control section... "adds..." and then it "divides"... Okay, fine. But a calculator can do this. The claims which recite the reporting absolutely require a physical structure for receiving and acting on, or displaying, the information. Otherwise these recitations are intended use, merely reciting a small computation which is going on for no reason, much like a calculator. These are not method claims, and as these computations (assuming there is no actual "adding" of bills to bills done by the control section, which is impossible without even further structure) achieve no effect in any of

Art Unit: 3653

the claimed features, they cannot conceivably carry patentable weight, much less define the claimed features in an unambiguous way.

Claim 5 recites, in the last line, "already set to said bill handling machine..."

Applicant is reminded that this is an apparatus claim, not a method claim. There is no chronology which can ably be recited in any definitive sense, unless a computer code is claimed which sets forth the chronology via chronological code. Further, what does "set to" mean?

Claim 6 suffers the same deficiency in that it claims "box is again set to the bill handling machine..." Again, apparatus claims are not affected by chronologies. Although this recitation would be at home in a method claim, the apparatus is not supposed to change with time. It is the same apparatus at one moment in time as it is in another, and therefore the word "again" inherently states that something has been changed and then changed back, in which it has not really changed unless, of course, a computer code can be claimed by which the control system effects such.

Claim 6 further recites that the control section "stores the event..." How can an event be stored? Where is it stored? In a box? In the closet?

Then, line 5 of claim 6 again recites "again".

Claim 7 recites the limitation "the number of bills" in line 4. There is insufficient antecedent basis for this limitation in the claim. Which number? Of which box?

Claim 8 recites the limitation "the number of bills" in line 3. There is insufficient antecedent basis for this limitation in the claim. Which number? Of which box?

Art Unit: 3653

Claim 8 recites in line 4 that the control section "displays a message" yet there is no display means claimed. Like the reporting of numbers of bills, a control system by itself cannot display anything. A display means is required for doing such.

Claim 8 recites the limitation "the number of bills" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. Which number? Of which box?

Claim 9 recites the limitation "the number of bills" in line 2. There is insufficient antecedent basis for this limitation in the claim. Which number? Of which box?

Claim 9 recites the limitation "the amount of bills" in line 4. There is insufficient antecedent basis for this limitation in the claim. Which amount? Of which box?

Claims 10 and 17 recite the updating of "the amount of bills stored in said storing box to the number of bills acquired from said storage box." A control section cannot update the amount of bills stored, unless it physically transfers bills to or away from the boxes, via the transport path. Clearly this is not the case.

The control system is doing computations inside itself, in/upon media that are not claimed, and the effects of which are not recited, or, if they are, there is no means by which they are effected. This last sentence applies to almost every 35 U.S.C. 112 rejection of almost every claim. Who cares what the control system determines? The apparatus is still the apparatus. The transport system is still the transport system. The pusher plate is still the pusher plate. The storing boxes are still the storing boxes. And, most importantly, the control section is still the control section, merely carrying a few binary digits or not, according to the words "again", "divided", "reports". The only way

Art Unit: 3653

these binary digits can be claimed is via a claim for computer code, or by mentioning the structural elements which act upon these determinations, and how they act.

Conceivably, any modern control system could be programmed to do almost any of the activities proposed in these claims.

Claim 12 recites that the storing boxes are "re-set to said bill handling machine"... The term "re-set" invokes a chronology that, as described in the foregoing, is not existent in the apparatus claims. Thus, the recitation of "beforehand registered" in line 7 of the claim is equally meaningless. In an apparatus, something is either set, or not.

Claim 16 recites "the amount of bills calculated before..." What amount of bills? Before what? Before noon?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,524,268 to Fukatsu.

Applicant is directed to columns 9, 10, lines 50-69 of column 12, and lines 1-8 of column 13, wherein can be found the driving of pushing plates, a control section to control a pushing section which pushes a pushing plate to detect an amount of bill

Art Unit: 3653

stored therein. The figures, and peripheral discussions in the body of Fukatsu, discuss the multiple boxes, show the "few bill" and "full-bill" (many-bill) detection sections, the transport path, receipt/payment section, judge section, and temporary storage. The apparatus can detect when a storing box is "set to" the bill handling machine.

Claims 1-7, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,099,423 to Graef et al. (hereafter "Graef")

Graef teaches the bill handling machine with receipt-payment section, a plurality of storing boxes, a transport path linking the receipt-payment section to the storing boxes, and a control section, wherein the storing boxes respectively include pushing plates (36, 96) which are driven to detect an amount of bills stored therein. Column 9 recites the embodiment wherein many detectors are stationed along the box whereby flag (96) passes to provide signals indicating, among other amounts, few-bill and many-bill signals. Graef performs calculations for determining the number of bills in the box when the flag is adjacent neither of the few-bill and many-bill indicators. Storing box detection section detects when the boxes are set to the handling machine, and detects when the box is "again set", and at which point acquires storing box information uniquely assigned to the storing boxes, the information including the number of bills. The information further includes information indicating a type of the bills.

Claims 1-5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 6-293467 to Yoshida.

Yoshida teaches a bill handling machine with payment-payment section, a plurality of storing boxes, a transport path linking the receipt-payment section to the

Art Unit: 3653

storing boxes, and a control section, wherein the storing boxes respectively include pushing plates (18) which are driven to detect an amount of bills stored therein.

Yoshida performs calculations for determining the number of bills in the box when the plate is in neither of the few-bill and many-bill detection areas.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K Schlak whose telephone number is 703-305-0885. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306 - 4173. The fax phone number for the organization where this application or proceeding is assigned is 703-306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308 - 1113.

dkS


DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600